

Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable FM-SR086TBJ Coax in 36 Inch



FMCA1565-36

Configuration

- Connector 1: Slide-On BMA Plug Bulkhead
- Connector 2: Snap-On BMA Jack
- Cable Type: FM-SR086TBJ
- Coax Flex Type: Formable

Features

- Max Frequency 20 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- Rack and Panel
- BMA Cable RF Backplanes
- Phased Array Interconnects
- High Speed Switching Networks
- Blind Mate BMA Test

Description

The BMA plug slide-on bulkhead to BMA jack snap-on 36 inch cable using FM-SR086TBJ coax, part number FMCA1565-36, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to BMA cable assembly has a plug to jack gender configuration with 50 ohm formable FM-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA1565-36 BMA plug to BMA jack cable assembly operates to 20 GHz. Our RF cable assembly with BMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	GHz
VSWR			1.5:1	
Return Loss			15.56	dB
Velocity of Propagation		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Operating Voltage (AC)			350	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	20	GHz
Insertion Loss (Typ.)	0.88	1.12	1.73	2.48	3.8	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length	36 in [914.4 mm]
Width/Diameter	0.35 in [8.89 mm]

Cable

Cable Type	FM-SR086TBJ
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor 1 Material and Plating	Tinned Copper Composite Braid
Jacket Material	FEP, Black
Jacket Diameter	0.105 in [2.67 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	0.787 in [19.99 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BMA Plug Bulkhead	BMA Jack
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method	Slide-On	Snap-On
Contact Material and Plating	Bronze, Gold	Beryllium Copper, Gold
Contact Plating Specification	51.18μ in. minimum	51.18μ in. minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Beryllium Copper, Gold
Outer Conductor Plating Specification	78.74μ in. minimum	
Body Material and Plating	Brass, Tri-Metal	Stainless Steel, Gold
Body Plating Specification	78.74μ in. minimum	19.68μ in. minimum
Hex Size	8 mm	

Environmental Specifications

Operating Range Temperature -40 to +105 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

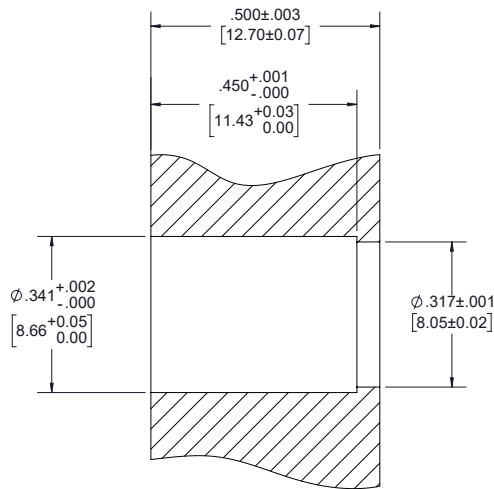
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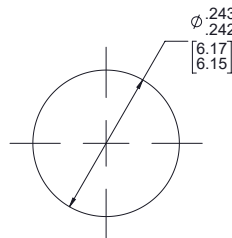
Typical Performance Data

PANEL CUTOUT



PANEL DRILLING

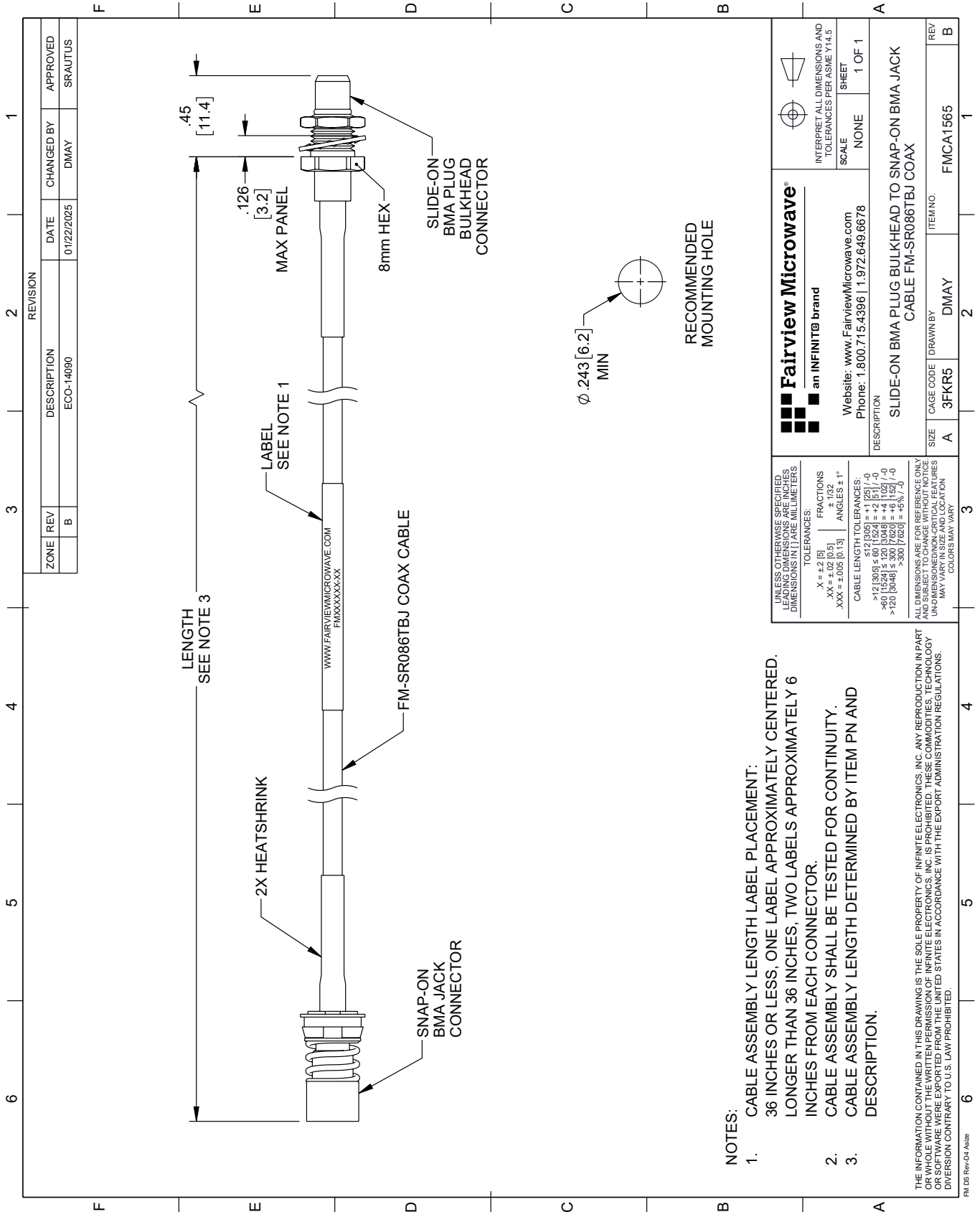
BMA PLUG BULKHEAD CUTOUT



MOUNTING HOLE

FMCA1565-36 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 A42b

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
B		ECO-14090	01/22/2025	DMAY	SRAUTUS

Fairview Microwave® an INFINIT® brand Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: SLIDE-ON BMA PLUG BULKHEAD TO SNAP-ON BMA JACK CABLE FM-SR086TBJ COAX		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: FMCA1565
DRAWN BY: DMAY	REV: B	

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ±.132
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.125 [-0
 >60 [1524] ≤ 120 [3048] = ±.1 [2.5] [-0
 >120 [3048] ≤ 300 [7620] = ±.5% [-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. COLORS MAY VARY.